

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	647	(alpha adj amylase) and rhizomucor\$	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/03/10 09:59
L2	1265420	l1 NOT tang l.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/03/10 10:01
L3	645	L1 NOT Tang.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/03/10 10:03
L4	54456	L1 NOT Tang.in. or Wu.in. or duan.in. or johannesen.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/03/10 10:03
L5	641	L3 NOT wu.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/03/10 10:03
L6	641	L5 NOT duan.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/03/10 10:03
L7	641	L6 NOT johannesen.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/03/10 10:04
L8	641	L7 NOT DSM adj "15344"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/03/10 10:05

**Basic Search**

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"alpha amylase " AND rhizomucor ANDNOT (Lan AND T)

Search

☒ Journal sources ☒ Preferred Web sources ☒ Other Web sources ☐ Exact phrase

Searched for:: :All of the words:"**alpha amylase** " AND **rhizomucor** ANDNOT (**Lan** AND **T**)

Found:: :**223 total** | **13 journal results** | **204 preferred web results** | **6 other web results**

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☐ 1. **ALPHA-AMYLASE VARIANTS**

**SVENDSEN, Allan Novo Nordisk A/S / KJAERULFF, Soren / BISGARD-FRANTZEN, Henrik Novo Nordisk A/S / ANDERSEN, Carsten Novo Nordisk A/S / Novozymes A/S, EUROPEAN PATENT**, Sep 2001

...amylases with altered properties relative of the parent **alpha-amylase**. Said properties include increased stability, e.g., at acidic...rsqb;-amylase shown in SEQ ID NO: 5, said hybrid **Bacillus alpha-amylase** being identical to the **Bacillus licheniformis** &lsqb;#945...

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☐ 2. **ALPHA-AMYLASE VARIANT WITH ALTERED PROPERTIES**

**SVENDSEN, Allan / ANDERSEN, Carsten / THISTED, Thomas / VON DER OSTEN, Claus / NOVOZYMES A/S, PATENT COOPERATION TREATY APPLICATION**, Nov 2002

**Alpha-amylase** variant with altered properties FIELD OF THE INVENTION...invention relates to a variant of parent Termamyl-like **alpha- amylase**, which 5 variant has **alpha-amylase** activity and exhibits an alteration in at least one of...

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☐ 3. **ALPHA-AMYLASE VARIANT WITH ALTERED PROPERTIES**

**ANDERSEN, Carsten / NOVOZYMES A/S, PATENT COOPERATION TREATY APPLICATION**, Apr 2002

...**Bacillus** origin, which variant has **alpha- amylase** activity and exhibits an alteration...properties relative to said parent **alpha-amylase**: substrate specificity, substrate binding...invention is to provide an improved **alpha- amylase**, in particular suitable for detergent...

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☐ 4. **ALPHA-AMYLASE VARIANTS WITH ALTERED 1,6-ACTIVITY**

**NIELSEN, Bjarne, Rø / nfeldt / NOVOZYMES A/S, PATENT COOPERATION TREATY APPLICATION**, Nov 2001

**Alpha-amylase** variants with altered 1,6-activity...comprising a DNA sequence encoding

Re  
us  
fol  
aci  
am  
am  
am  
as  
as  
ba  
fila  
fur  
ho  
mu  
no  
pe  
pla  
pol  
pr  
Or  
Al  
F  
Al  
Gre  
Am  
Sav  
Al  
Vita  
Sup


the **alpha- amylase** variant of the invention, an expression...the properties of enzymes - on :  
such as **alpha-amylase** - to obtain an enzyme with properties...

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☐ 5. ALPHA-AMYLASE MUTANTS WITH ALTERED STABILITY

**FUGLSANG, Claus, Crone / NOVOZYMES A/S, PATENT COOPERATION TREATY APPLICATION**, Feb 2002


...comparison to the corresponding parent **alpha- amylase**, i. e., un-mutated alphaamylase, has **alpha-amylase** activity and exhibits an alteration...properties relative to said parent **alpha- amylase**: stability under, e.g., high temperature...

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☐ 6. FUNGAMYL-LIKE ALPHA-AMYLASE VARIANTS

**BISGÅ / RD-FRANTZEN, Henrik / SVENDSEN, Allan / PEDERSEN, Sven / NOVOZYMES A/S, PATENT COOPERATION TREATY APPLICATION**, May 2001

TITLE: Fungamyl-like **Alpha-Amylase** Variants FIELD OF THE INVENTION The present invention relates to **alpha-amylase** variants (mutants) of Fungamyl...important class of enzymes. A number of **alpha- amylase** referred to as " TermamylO'- like...

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☐ 7. AGROTIS SEGETUM ALPHA-AMYLASE

**SHUSTER, Jeffrey / CONNELLY, Mariah, Bindell / NOVO NORDISK BIOTECH, INC., PATENT COOPERATION TREATY APPLICATION**, Mar 2001

POLYPEPTIDES HAVING **ALPHA-AMYLASE** ACTIVITY AND NUCLEIC ACIDS ENCODING...isolated polypeptides having **alpha- amylase** activity and isolated nucleic...alkaline pH. Examples of commercial **alpha-amylase** products are TERMAMYL9, DURAMYL...

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☐ 8. ALPHA-AMYLASE VARIANTS

**ANDERSEN, Carsten / JØ / RGENSEN, Christel, Thea / BISGÅ / RD-FRANTZEN, Henrik / SVENDSEN, Allan / KJÆ / (...) / NOVO NORDISK A/S, PATENT COOPERATION TREATY APPLICATION**, Oct 2000

**Alpha-AMYLASE** VARIANTS FIELD OF THE INVENTION The...important class of enzymes. A number of **alpha- amylase** such as Termamyl-like alpha-amylases...structural data for a Termamyl-like **alpha-amylase**, referred to as BA2, which consists...

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☐ 9. POLYPEPTIDES HAVING ALKALINE ALPHA-AMYLASE ACTIVITY AND NUCLEIC ACIDS ENCODING SAME

**OUTTRUP, Helle / HOECK, Lisbeth, Hedegaard / NIELSEN, Bjarne, Rø / nfeldt / BORCHERT, Torben, Vedel / NIELSEN, Vibeke, Skovgaard / BISGÅ / (...) / ANDERSEN, Carsten, PATENT COOPERATION TREATY APPLICATION**, Oct 2000

POLYPEPTIDES HAVING ALKALINE **ALPHA-AMYLASE** ACTIVITY AND NUCLEIC ACIDS ENCODING...relates to isolated polypeptides having **alpha- amylase** activity and isolated nucleic acid...invention relates to variants of the **alpha-amylase** of the invention. The invention also...

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☐ **10. POLYPEPTIDES HAVING ALKALINE ALPHA-AMYLASE ACTIVITY AND NUCLEIC ACIDS ENCODING SAME**

**OUTTRUP, Helle / HOECK, Lisbeth, Hedegaard / NIELSEN, Bjarne, Rø / nfeldt / BORCHERT, Torben, Vedel / NIELSEN, Vibeke, Skovgaard / BISGÅ / (...) / ANDERSEN, Carsten, PATENT COOPERATION TREATY APPLICATION, Oct 2000**  
POLYPEPTIDES HAVING ALKALINE **ALPHA-AMYLASE** ACTIVITY AND NUCLEIC ACIDS ENCODING...describe an alkaline pullulanase having **alpha-amylase** activity. Fig. 2b of the document shows...559 (1996) describe an alkaliphilic **alpha - amylase** -pullulanase from Bacillus sp. The...

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☐ **11. Enzymes at work L3.qxd [PDF-152K]**  
Jan 2002


1. WHY USE ENZYMES FOR INDUSTRIAL PROCESSES? 7 2. THE NATURE OF ENZYMES 8  
2.1 Chemical reactions take place under mild conditions 8 2.2 Highly specific action 8 2.3  
Very fast reaction rates 8 2.4 Numerous enzymes for different tasks 8 3. INDUSTRIAL  
ENZYME PRODUCTION 10 4.

[[http://www.novozymes.com/library/Documents/Enzymes\\_at\\_...](http://www.novozymes.com/library/Documents/Enzymes_at_...)]  
[similar results](#)

☐ **12. MALTOGENIC ALPHA-AMYLASE VARIANTS**

**CHERRY, Joel, Robert / SVENDSEN, Allan / ANDERSEN, Carsten / BEIER, Lars / FRANDSEN, Torben, Peter / NOVO NORDISK A/S, PATENT COOPERATION TREATY APPLICATION, Sep 1999**

MALTOGENIC **ALPHA-AMYLASE** VARIANTS FIELD OF THE INVENTION...BACKGROUND OF THE INVENTION Maltogenic **alpha-amylase** (glucan 1,4-cc-maltohydrolase...well as cyclodextrin. A maltogenic **alpha-amylase** from Bacillus (EP 120 693) is commercially...

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[similar results](#)

☐ **13. PREPARATION OF DOUGH AND BAKED PRODUCTS**

**SPENDLER, Tina / NILSSON, Lone / FUGLSANG, Claus, Crone / Novozymes A/S, EUROPEAN PATENT, Feb 2001**

...Thermomyces ( Humicola ), **Rhizomucor**, Candida, Aspergillus, Rhizopus...Humicola lanuginosa ), **Rhizomucor** miehei , Candida antarctica...lipase may be derived from **Rhizomucor** miehei as described in EP...together with a maltogenic **alpha-amylase**, a phospholipase and a phospholipid...

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☐ **14. FERMENTATION PROCESS INCLUDING THE USE OF ENZYMES**

**OLSEN, Hans, Sejr / PEDERSEN, Sven / BECKERICH, Robert / VEIT, Christopher / FELBY, Claus / NOVOZYMES NORTH AMERICA, INC, PATENT COOPERATION TREATY APPLICATION, Sep 2002**

...generating enzyme activity and at least an **alpha-amylase** activity and/or one or more yeast cell...source generating enzyme activity, **alpha- amylase** activity, protease activity and debranching...product of step (a) in the presence of an **alpha- amylase**, (c) saccharifying the liquefied material...


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☐ **15. POLYPEPTIDES HAVING GLUCANOTRANSFERASE ACTIVITY AND NUCLEIC ACIDS**

ENCODING SAME

**FUKUYAMA, Shiro / Novozymes A/S, EUROPEAN PATENT**, Jul 2002


FIELD OF THE INVENTION The present invention relates to isolated polypeptides having glucanotransferase activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host...

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☐ **16. RECOMBINANT LIPASE AND ALPHA-AMYLASE VARIANTS**

**NIELSEN, Egon / RASMUSSEN, Grethe / HALKIER, Torben / Novozymes A/S, EUROPEAN PATENT**, Oct 1995


...embodiments, the lipase is obtainable from a strain of **Rhizomucor**, e.g. **Rhizomucor miehei**, or a strain of *Candida*, e.g. *C. antarctica*...enzymes, among these the *Humicola lanuginosa* and **Rhizomucor miehei** lipases ( vide e.g. European Patent Applications...

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☐ **17. VARIANTS WITH ALTERED PROPERTIES**

**ANDERSEN, Carsten / BORCHERT, Torben, Vedel / NIELSEN, Bjarne, Rø / nfeldt / NOVOZYMES A/S, PATENT COOPERATION TREATY APPLICATION**, Sep 2001

...following properties relative to said parent **alpha-amylase**: substrate specificity, substrate binding...comparison to the corresponding parent **alpha- amylase**, i.e., un-mutated **alpha-amylase**, has **alpha amylase** activity and exhibits...

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☐ **18. PREPARATION OF BAKED PRODUCT FROM DOUGH**

**CHRISTIANSEN, Luise / BUDOLFSSEN, Gitte / NOVOZYMES A/S, PATENT COOPERATION TREATY APPLICATION**, Apr 2002


...stearothermophilus or an **alpha-amylase** from *Bacillus*...or a fungal **alpha-amylase**, e.g. from *A...**Thermomyces* (*Humicola*), **Rhizomucor**, *Candida*, *Aspergillus*...*lanuginosa*), **Rhizomucor miehei**, *C. antarctica*...ppm), fungal **alpha-amylase** (*Fungamyl* at...

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☐ **19. EXENDIN-4 CONJUGATES AND THEIR MEDICAL USE**

**LARSEN, Bjarne, Due / MIKKELSEN, Jens, Damsgaard / NEVE, Soren / Zealand Pharma A/S, EUROPEAN PATENT**, Apr 2002


FIELD OF THE INVENTION The present invention relates to peptide conjugates of exendin-4, and especially conjugates that lower blood glucose levels. The conjugates may be used in the treatment of diseases that benefit from regulation of excess levels...

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☐ **20. FLUID BED PROCESS FOR THE PRODUCTION OF ENZYME GRANULES**

**BARENDSE, Rudolf, Carolus, Maria / MEESTERS, Gabriel, Marinus, Hencicus / HAPPEL, Antonius, Johannes, Maria / DSM N.V., PATENT COOPERATION TREATY APPLICATION**, Nov 2001

...preferably a fungal **alpha-amylase**, more preferably an **alpha-amylase** from *Aspergillus*...clotting enzyme from **Rhizomucor** species, most preferably from **Rhizomucor miehei**. Another...granules containing **alpha-amylase** from *Aspergillus*...

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"alpha amylase " AND rhizomucor

- 2002

Search

Adv  
Sci  
Sci

The "AND" operator is unnecessary -- we include all search terms by default. [\[details\]](#)

Scholar

Results 1 - 10 of about 11 for "alpha amylase " AND rhizomucor. (0.07 seconds)

High Level Expression of Recombinant Genes in Aspergillus Oryzae - group of 2 »

T Christensen, H Woeldike, E Boel, SB Mortensen, K ... - Bio/Technology, 1988 - nature.com  
... of a precursor to the aspartic proteinase from **Rhizomucor** miehei shows that ... Optimized  
condition for determining activity concentration of **alpha-amylase** in serum ...

Cited by 91 - [Web Search](#)

**Rhizomucor** miehei triglyceride lipase is processed and secreted from transformed Aspergillus oryzae

B Høge-Jensen, F Andreassen, T Christensen, M ... - Lipids, 1989 -.ncbi.nlm.nih.gov  
... The cDNA encoding the precursor of the **Rhizomucor** miehei triglyceride lipase was ...  
cDNA is under control of the Aspergillus oryzae **alpha-amylase** gene promoter ...

Cited by 19 - [Web Search](#)

Production of Biologically Active Recombinant Human Lactoferrin in Aspergillus Oryzae - group of 4 »

PP Ward, JY Lo, M Duke, GS May, DR Headon, OM ... - Bio/Technology, 1992 - nature.com  
... 1989. **Rhizomucor** miehei triglyceride lipase is processed and secreted  
from transformed Aspergillus oryzae. Lipids 24: 781-785. ...

Cited by 32 - [Web Search](#)

D-Amino acid oxidase and catalase of detergent permeabilized Rhodotorula gracilis cells and its ... - group of 4 »

R Upadhyay, H Nagajyothi, SG Bhat - Process Biochemistry, 1999 - ingentaconnect.com  
... Production and properties of the raw starch-digesting **alpha-amylase** of Bacillus  
sp. ... Fungal biomass from **Rhizomucor** pusillus as adsorbent of chromophores from a ...

Cited by 5 - [Web Search](#) - [BL Direct](#)

A new transcriptional activator for amylase genes in Aspergillus - group of 3 »

KL Petersen - Molecular and General Genetics MGG, 1999 - Springer  
Page 1. ORIGINAL PAPER KL Petersen á J. Lehmbeck á T. Christensen A new  
transcriptional activator for amylase genes in Aspergillus ...

Cited by 12 - [Web Search](#) - [BL Direct](#)

Partial list of microorganisms and microbial-derived ingredients that are used in foods

US Food, D Administration - Center for Food Safety & Applied Nutrition, Office of ..., 1998 - vm.cfsan.fda.gov  
... contain the gene for aspartic proteinase from **Rhizomucor** miehei var ... **Alpha-amylase**  
enzyme preparation from Bacillus stearothermophilus used to hydrolyze edible ...

Cited by 2 - [Cached](#) - [Web Search](#)

Extracellular and mycelial amylases of the thermophilic fungus Malbranchea sulfurea

SP Gautam, AK Gupta - Mycopathologia, 1992 - Springer  
... Mycelial amylase activities of thermophilic species of **Rhizomucor**, Humicola and  
Papulaspora ... A photometric method for determi- nation of **alpha amylase** in blood ...

[Web Search](#)

Thermophilic Fungi: Their Physiology and Enzymes - group of 9 »

R Maheshwari, G Bharadwaj, MK Bhat - MICROBIOLOGY AND MOLECULAR BIOLOGY REVIEWS, 2000 - mmbbr.asm.org  
... affinity of enzyme. **Rhizomucor** miehei, formerly called Mucor miehei, also produces active extracellular lipase. The isolation and ...  
[Cited by 34](#) - [Web Search](#) - [BL Direct](#)

### Characterization of groups of the zygomycete genus Rhizopus

CB Frye, DJ Reinhardt - Mycopathologia, 1993 - Springer  
... and lower animals [2]. Species of the genera Rhizopus, Absidia, **Rhizomucor**, and Mucor ... at a final concentration of 50 ixg/ml and **alpha-amylase** (Sigma) at a ...  
[Cited by 1](#) - [Web Search](#) - [BL Direct](#)

### Enzymes in Low Water Systems - group of 3 »

MT de Gómez-Puyou, A Gómez-Puyou - Critical Reviews in Biochemistry and Molecular Biology, 1998 - Taylor & Francis  
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"alpha amylase " AND rhizomucor

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